Interview Summary	Application No.	Applicant(s)
	09/751,658	ANDERSON ET AL.
	Examiner	Art Unit
	William H. Beisner	1744
All participants (applicant, applicant's representative, PTO personnel):		
(1) <u>William H. Beisner</u> .	(3)	
(2) <u>Ivan Zikovsky</u> .	(4)	
Date of Interview: <u>05 February 2003</u> .		
Type: a)⊠ Telephonic b)⊡ Video Conference c)⊡ Personal [copy given to: 1)⊡ applicant 2)⊡ applicant's representative]		
Exhibit shown or demonstration conducted: d)☐ Yes e)⊠ No. If Yes, brief description:		
Claim(s) discussed: <u>All pending and claims proposed by the Examiner</u> .		
ldentification of prior art discussed: <u>All prior art of record</u> .		
Agreement with respect to the claims f)□ was reached. g)⊠ was not reached. h)□ N/A.		
Substance of Interview including description of the general nature of what was agreed to if an agreement was reached, or any other comments: <u>See Continuation Sheet</u> .		
(A fuller description, if necessary, and a copy of the amendments which the examiner agreed would render the claims allowable, if available, must be attached. Also, where no copy of the amendments that would render the claims allowable is available, a summary thereof must be attached.)		
i) It is not necessary for applicant to provide a separate record of the substance of the interview(if box is checked).		
Unless the paragraph above has been checked, THE FORMAL WRITTEN REPLY TO THE LAST OFFICE ACTION MUST INCLUDE THE SUBSTANCE OF THE INTERVIEW. (See MPEP Section 713.04). If a reply to the last Office action has already been filed, APPLICANT IS GIVEN ONE MONTH FROM THIS INTERVIEW DATE TO FILE A STATEMENT OF THE SUBSTANCE OF THE INTERVIEW. See Summary of Record of Interview requirements on reverse side or on attached sheet.		
Examiner Note: You must sign this form unless it is an Attachment to a signed Office action.	Examiner's sign	ature, if required

Manual of Patent Examining Procedure (MPEP), Section 713.04, Substance of Interview Must be Made of Record

A complete written statement as to the substance of any face-to-face, video conference, or telephone interview with regard to an application must be made of record in the application whether or not an agreement with the examiner was reached at the interview.

Title 37 Code of Federal Regulations (CFR) § 1.133 Interviews

Paragraph (b)

In every instance where reconsideration is requested in view of an interview with an examiner, a complete written statement of the reasons presented at the interview as warranting favorable action must be filed by the applicant. An interview does not remove the necessity for reply to Office action as specified in §§ 1.111, 1.135. (35 4.2.132)

37 CFR §1.2 Business to be transacted in writing.

All business with the Patent or Trademark Office should be transacted in writing. The personal attendance of applicants or their attorneys or agents at the Patent and Trademark Office is unnecessary. The action of the Patent and Trademark Office will be based exclusively on the written record in the Office. No attention will be paid to any alleged oral promise, stipulation, or understanding in relation to which there is disagreement or doubt.

The action of the Patent and Trademark Office cannot be based exclusively on the written record in the Office if that record is itself incomplete through the failure to record the substance of interviews.

It is the responsibility of the applicant or the attorney or agent to make the substance of an interview of record in the application file, unless the examiner indicates he or she will do so. It is the examiner's responsibility to see that such a record is made and to correct material inaccuragies which bear directly on the question of patentability.

Examiners must complete an Interview Summary Form for each interview held where a matter of substance has been discussed during the interview by checking the appropriate boxes and filling in the blanks. Discussions regarding only procedural matters, directed solely to restriction requirements for which interview recordation is otherwise provided for in Section 812.01 of the Manual of Patent Examining Procedure, or pointing out typographical errors or unreadable script in Office actions or the like, are excluded from the interview recordation procedures below. Where the substance of an interview is completely recorded in an Examiners Amendment, no separate Interview Summary Record is required.

The Interview Summary Form shall be given an appropriate Paper No., placed in the right hand portion of the file, and listed on the "Contents" section of the file wrapper. In a personal interview, a duplicate of the Form is given to the applicant (or attorney or agent) at the conclusion of the interview. In the case of a telephone or video-conference interview, the copy is mailed to the applicant's correspondence address either with or prior to the next official communication. If additional correspondence from the examiner is not likely before an allowance or if other circumstances dictate, the Form should be mailed promptly after the interview rather than with the next official communication.

The Form provides for recordation of the following information:

- Application Number (Series Code and Serial Number)
- Name of applicant
- Name of examiner
- Date of interview
- Type of interview (telephonic, video-conference, or personal)
- Name of participant(s) (applicant, attorney or agent, examiner, other PTO personnel, etc.)
- An indication whether or not an exhibit was shown or a demonstration conducted
- An identification of the specific prior art discussed
- An indication whether an agreement was reached and if so, a description of the general nature of the agreement (may be by attachment of a copy of amendments or claims agreed as being allowable). Note: Agreement as to allowability is tentative and does not restrict further action by the examiner to the contrary.
- The signature of the examiner who conducted the interview (if Form is not an attachment to a signed Office action)

It is desirable that the examiner orally remind the applicant of his or her obligation to record the substance of the interview of each gase unless both applicant and examiner agree that the examiner will record same. Where the examiner agrees to record the substance of the interview, or when it is adequately recorded on the Form or in an attachment to the Form, the examiner should check the appropriate box at the bottom of the Form which informs the applicant that the submission of a separate record of the substance of the interview as a supplement to the Form is not

It should be noted, however, that the Interview Summary Form will not normally be considered a complete and proper recordation of the interview unless it includes, or is supplemented by the applicant or the examiner to include, all of the applicable items required below concerning the substance of the interview.

A complete and proper recordation of the substance of any interview should include at least the following applicable items:

- 1) A brief description of the nature of any exhibit shown or any demonstration conducted,
- 2) an identification of the claims discussed,
- 3) an identification of the specific prior art discussed,
- 4) an identification of the principal proposed amendments of a substantive nature discussed, unless these are already described an the Interview Summary Form completed by the Examiner,
- 5) a brief identification of the general thrust of the principal arguments presented to the examiner,

(The identification of arguments need not be lengthy or elaborate. A verbatim or highly detailed description of the arguments is not required. The identification of the arguments is sufficient if the general nature or thrust of the principal arguments made to the examiner can be understood in the context of the application file. Of course, the applicant may desire to emphasize and fu describe those arguments which he or she feels were or might be persuasive to the examiner.)

- 6) a general indication of any other pertinent matters discussed, and
- 7) if appropriate, the general results or outcome of the interview unless already described in the Interview Summary Form completed by the examiner

Examiners are expected to carefully review the applicant's record of the substance of an interview. If the record is not complete and accurate, the examiner will give the applicant an extendable one month time period to correct the record.

Examiner to Check for Accuracy

If the claims are allowable for other reasons of record, the examiner should send a letter setting forth the examiner's version of the statement attributed to him or her. If the record is complete and accurate, the examiner should place the indication, "Interview Record OK" on the paper recording the substance of the interview along with the date and the examiner's initials.

Continuation of Substance of Interview including description of the general nature of what was agreed to if an agreement was reached, or any other comments: As requested by Applicants' Representative, the Examiner contacted Applicants' Representative to discuss the instant application prior to acting on the instant claims (See Request dated 02 Dec. 2002). In view of the response filed 02 Dec. 2002, the Examiner suggested amendments to the claims to overcome 35 USC 112, second paragraph, rejections. The Examiner also stated that obviousness-type double patenting rejections were applicable and that terminal disclaimers would be required with respect to U.S. Patent No. 6,197,595 and 5,922,591. The Examiner will fax Applicants' Representative proposed claims that would define over the prior art of record and overcome 35 USC 112, second paragraph, issues. Applicants' representative will review the proposed amendments and contact the Examiner on 07 Feb. 2003 regarding the Examiner's proposed claim amendments (See Attachment).

PROPOSED AMENDMENTS

Replace independent claims 117, 90 and 92 with the following new claims:

136(old claim 117). A miniature fluidic system for measuring and processing a known volume of a liquid sample controlled by an external pressure source, comprising:

a microfabricated device having at least a first chamber including at least one vent port and a fluid port in communication with a controllable valve and a second chamber including at least one vent port and a fluid port in communication with a controllable valve, a common channel connecting the fluid ports of the first and second chambers, and wherein said first chamber is a volumetric chamber having a known volume, said vent ports allowing the passage of gas while preventing the passage of liquid;

a sealable closure inlet provided in communication with said common channel; means for opening or closing said controllable valves; and

means for creating pressure differentials in the device with respect to said closure inlet and vent ports such that liquid can flow from said closure inlet into said volumetric chamber or from said volumetric chamber into said second chamber.

137(old claim 90). A method of repeatedly measuring a known volume of a liquid sample in a miniature fluidic system, comprising:

- (a) providing the device of claim 136;
- (b) filling said volumetric chamber by introducing a liquid sample into said closure inlet, opening said controllable valve to said volumetric chamber and providing a pressure differential

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such that liquid flows from said closure inlet to completely fill said volumetric chamber to create a first aliquot of liquid;

- (c) closing said valve to said volumetric chamber and providing a pressure differential to clear the common channel of remaining liquid;
- (d) opening said valve to said volumetric chamber and said valve to said second chamber and providing a pressure differential to transfer said aliquot of liquid from said volumetric chamber to said second chamber;
 - (e) repeating steps (b), (c) and (d) to create and transfer a second aliquot of liquid.

138(old claim 92). A method of measuring and processing a known volume of a liquid sample in a miniature fluid system for integrated nucleic acid analysis, comprising:

- (a) providing the device of claim 136;
- (b) filling said volumetric chamber by introducing a liquid sample into said closure inlet, opening said controllable valve to said volumetric chamber and providing a pressure differential such that liquid flows from said closure inlet to completely fill said volumetric chamber to create a first aliquot of liquid;
- (c) closing said valve to said volumetric chamber and providing a pressure differential to clear the common channel of remaining liquid;
- (d) opening said valve to said volumetric chamber and said valve to said second chamber and providing a pressure differential to transfer said aliquot of liquid from said volumetric chamber to said second chamber.

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Changes to the pending claims:

- 90. Cancel (Replaced with new claim 137).
- 91. line 1, "90" has been changed to --137--.
- 92. Cancel (Replaced with new claim 138).
- 93. line 1, "92" has been changed to --138-- and at line 2, --during step (d)-- has been inserted after "chamber.
- 94. line 1, "92" has been changed to --138-- and at line 2, --during step (b)-- has been inserted after "chamber.
- 95. line 1, "92" has been changed to --138--.
- 96. No change.
- 97. No change.
- 98. line 1, "92" has been changed to --138-- and at line 2, --during step (b)-- has been inserted after "chamber.
- 99. No change.
- 100. No change.
- 101. line 1, "92" has been changed to --138-- and "fluid" has been changed to --sample--.
- 102. line 1, "92" has been changed to --138-- and "fluid" has been changed to --sample--.
- 103. line 1, "92" has been changed to --138-- and line 2, --in said second chamber-- has been added after "electrophoresis".
- 104. line 1, "92" has been changed to --138-- and --in said second chamber-- has been added after "transcription".

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105. line 1, "92" has been changed to --138-- and --in said second chamber-- has been added after "labeling".

- 106. line 1, "92" has been changed to --138-- and --in said second chamber-- has been added after "fragmentation".
- 107. line 1, "92" has been changed to --138-- and --in said second chamber-- has been added after "amplification".
- 108. No change.
- 109. No change.
- 110. No change.
- 111. No change.
- 112. line 1, "92" has been changed to --138-- and "fluid" has been changed to --sample--.
- 113. line 1, "92" has been changed to --138-- and "fluid" has been changed to --sample--.
- 114. line 1, "92" has been changed to --138-- and "fluid" has been changed to --sample--.
- 115. line 1, "92" has been changed to --138-- and at line 2, --in said system-- has been added after "form".
- 116. No change.
- 117. Cancel (Replaced with new claim 136).
- 118. line 1, "117" has been changed to --136-- and at line 2, "fluid" has been changed to --sample--.
- 119. line 1, "117" has been changed to --136-- and "fluid" has been changed to --sample--.
- 120. line 1, "117" has been changed to --136-- and at line 2, --in said second chamber-- has been added after "electrophoresis".

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- 121. line 1, "117" has been changed to --136-- and --in said second chamber-- has been added after "transcription".
- 122. line 1, "117" has been changed to --136-- and --in said second chamber-- has been added after "labeling".
- 123. line 1, "117" has been changed to --136-- and --in said second chamber-- has been added after "fragmentation".
- 124. line 1, "117" has been changed to --136-- and --in said second chamber-- has been added after "amplification".
- 125. No change.
- 126. No change.
- 127. line 1, "117" has been changed to --136--.
- 128. line 1, "117" has been changed to --136--.
- 129. line 1, "117" has been changed to --136--.
- 130. line 1, "117" has been changed to --136-- and at line 2, --within the system-- has been added after "form".
- 131. No change.
- 132. line 1, "90" has been changed to --137-- and at line 2, --during step (d)-- has been added after "chamber".
- 133. line 1, "90" has been changed to --137-- and at line 2, --during step (b)-- has been added after "chamber".
- 134. line 1, "92" has been changed to --138--.
- 135. line 1, "117" has been changed to --136--.

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restriction requirement.

Obviousness-type double patenting Issues:

Method claims 137(90), 138(92), 91, 93-116, 132-134 are obvious over at least claims 6-8 of U§ Patent 6,197,595. Applicants' comments stating that an obviousness-type double patenting rejection is improper in view of the restriction requirement made in parent application 08/671,928 is not found to be persuasive. In this restriction requirement, Group II consisted of claims 84-88 and Group IV consisted of claims 90-91. Claims 84-88 of Group II correspond to claims 1-5 of U.S. Patent No. 6,197,595. Claims 6-8 of U.S. Patent No. 6,197,595 were added during prosecution of application 09/294,700 and were not part of the claims of the original

Apparatus claims 136(117), 118-131 and 135 are obvious over at least claims 1-10, 16-22, 31, 41, 42, 43 of U. S. Patent No. 5,922,591.

A terminal disclaimer disclaiming Patents 6,197,595 and 5,922,591 would be required before allowing the above claims.